

Notice of Allowability

Application No.

10/797,075

Examiner

Arnel C. Lavarias

Applicant(s)

HOOGLAND ET AL.

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/1/04, 3/11/04.
2. ☒ The allowed claim(s) is/are 20-28 (renumbered 1-9).
3. ☒ The drawings filed on 11 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

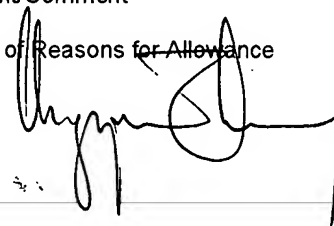
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 7/1/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



THONG NGUYEN

PRIMARY EXAMINER
GROUP 2800

DETAILED ACTION

Drawings

1. The drawings were received on 3/11/04. These drawings are acceptable.

Response to Amendment

2. The cancellation of Claims 1-19 in the first preliminary amendment filed 3/11/04 is acknowledged and accepted.

Allowable Subject Matter

3. Claims 20-28 are allowed.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jonathan Bockman (703-760-7769) on 12/6/04.

The application has been amended as follows:

Paragraph 0083, line 4, after '708 is', delete 'also'.

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Paragraph 0090, line 1, after 'Lens unit', change '500' to --1000--.

Claim 20, line 5, after 'of 100mm', insert --, wherein EFL is the effective focal length--.

Claim 26, line 2, after 'Petzval curvature-', insert --between--.

5. The following is an examiner's statement of reasons for allowance:

Claim 20 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest a two-component lens unit, wherein the two-component lens unit has, in combination, a pupil distance that is at least 30% of EFL, a back focal length that is at least 30% of EFL, and a meniscus shaped lens element with an optical power between -0.003 and 0.011 when scaled to an EFL of 100 mm. Claims 21-28 are dependent on Claim 20, and hence are allowable for at least the same reasons that Claim 20 is allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 4189212 to Mizutani et al.

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Mizutani et al. is being cited to evidence a conventional two-component lens unit (See for example Figures 1-9), the lens unit including a first lens component (See for example 'Diverging Lens Group' L1, L2, L3, L4 in Figure 1) and a second lens component (See for example 'Converging Lens Group' L5, L6, L7, L8, L9 in Figure 1), wherein the two-component lens unit includes an EFL of 36.023-68.795 mm (See Example 1), a back focal length of 43.776-68.622 mm (99-122% of EFL) (See Example 1), and a meniscus shaped lens element with an optical power of +0.008447 (See for example L4 in Figure 1; r7, r8 in Example 1). Mizutani et al. additionally discloses at least one lens material having a refractive index greater than 1.6 (See Example 1); an F/# of 3.5-4 (See various Examples); and a maximum angle of view of 60-80 degrees (See various examples). However, Mizutani et al. lacks a pupil distance that is at least 30% of EFL, and the EFL being 100 mm.

U.S. Patent No. 4932764 to Simpson, Jr.

Simpson, Jr. is being cited to evidence an optical system for photographic devices (See for example Figures 1-4), the optical system including two lenses (See for example 12a, 14a in Figure 1). The optical system further includes a meniscus shaped lens with a power of 0.0191 (See Example 4, 13d, S3d, S4d in Figure 4), a field of view of 62.6 degrees, and a F/# of 8 (See col. 3, lines 51-56). Simpson, Jr. lacks the optical system including an EFL of 100 mm, a pupil distance at least 30% of EFL, and a back focal length at least 30% of EFL.

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U.S. Patent No. 4707085 to Takanashi et al.

Takanashi et al. is being cited to evidence a conventional F θ lens that includes two lenses (See 10, 20 in Figure 1). The F θ lens further includes one of the lenses being a meniscus lens (See 10 in Figure 1) having a power of 0.00226 (See for example Example 1); an EFL of 100 mm (See for example Example 1); and at least one of the lens materials having a refractive index greater than 1.6 (See for example Example 1). Takanashi et al. lacks the F θ lens including a pupil distance that is at least 30% EFL and a back focal length that is at least 30% EFL.

U.S. Patent No. 5689376 to Lewis.

Lewis is being cited to evidence various two element optical systems for use in cameras (See for example Figures 1, 3, 5, 7, 9, 11, 13, 15, 17). The various two element optical systems include at least one meniscus lens (See for example E_{1A}, E_{2A} in Figure 1); a pupil distance at least 30% of EFL; and a back focal length at least 30% of EFL (See EF, BF, FF in the various Tables). Lewis additionally discloses the optical systems having an F/# of 8 and a wide field of view (approximately 65-80 degrees) (See various Tables). Lewis lacks the optical power of the meniscus lens being between -0.003 and 0.011 and the EFL being 100 mm.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 8:30 AM - 5 PM EST.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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12/6/04



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